

REMARKS

This Amendment is filed in response to the final Office Action dated January 30, 2004, which has a shortened statutory period set to expire April 30, 2004.

Phone Application Development Environment: General Overview

Applicants teach a zero-footprint remotely hosted phone application development environment. Specification, page 4, lines 10-11. In this environment, a developer can use a standard computer (without any specialized software) and a telephone to develop sophisticated phone applications that use speech recognition and/or touch tone inputs to perform tasks, access web-based information, and/or perform commercial transactions. Specification, page 4, lines 11-15.

For example, referring to Fig. 1, a developer could use computer 102 to register in the development environment, e.g. by identifying herself/himself to a web-based application on development platform web server 108. Specification, page 20, lines 3-5. Based on the identity of the developer, a call number is provided to the developer. Specification, page 20, lines 13-22. The developer can develop the phone application code using a URI or a scratchpad. Specification, page 22, lines 3-5.

The URI can serve as a reference or pointer to the actual application code for the phone application platform 110, e.g. application file 114 in web server 101. Specification, page 22, lines 12-13. The URI can be submitted to development platform web server 108 by clicking an HTML form submit button. Specification, page 22, lines 13-16. Scratchpad development can be performed in a browser associated with computer 102 and can include a text entry field. Specification, page 23, lines 9-11.

The scratchpad can be an HTML form element. Specification, page 23, line 12.

At this point, the developer can make edits to the application file. Specification, page 21, lines 7-8. To assist the developer in this editing process, a call flow can be provided. Specification, page 24, line 21 to page 25, line 1. The call flow information tracks a flow of execution for a phone call. Specification, page 25, line 13. In other words, as a phone application transitions from a first state to a second state, that information is available to the developer while he/she is on the phone using the application. Specification, page 25, lines 6-7. Similarly, the results of speech recognition can be shown, thus the developer can distinguish between a speech recognition error and a program logic error easily. Specification, page 25, lines 8-9.

As discussed in further detail below, the cited references do not teach Applicants' zero-footprint remotely hosted phone application development environment and thus do not provide the advantages of this environment.

Burg And House Fail To Render Obvious Claims 1-2, 4-7, 9-22, and 24-29

Applicants respectfully submit that the cited references, either individually or in combination, fail to disclose or suggest Claim 1. Specifically, Claim 1, as amended, now recites in part,

receiving the phone application code over the network interface from a remote computer via a development platform web server and using a web protocol... and

presenting a call flow to the remote computer over the network interface via the development platform web server and using the web protocol, the call flow tracking a flow of execution for a phone call.

In contrast, Burg teaches a system that automatically translates a web on-line sales menu to an IVR menu (see Fig. 3 of Burg). Col. 3, lines 6-7 and col. 5, line 64 to col. 7, line 20. Fig. 3 of Burg teaches that URLs of a web page are systematically downloaded and analyzed to provide a web menu. Col. 5, line 64 to Col. 7, line 20. The system allows the operator an opportunity to verify the analysis by tracking through the web page and site to resolve questions on the analysis. Col. 7, lines 21-23.

Once the operator is satisfied with the basic translation of the web menu architecture to IVR menu architecture, the system creates an IVR outline. Col. 7, line 24-26. During this process, the system generates voice prompts and desired IVR responses. Col. 7, lines 31-34. Using a computer and telephone, the operator can monitor the automated translation of the web menu structure to an IVR menu structure with prompts and responses. Col. 8, lines 13-16.

Once the IVR menu structure, prompts, and responses are developed, the system has completed the initial translation. Col. 7, line 49-50. The system allows the operator to modify the proposed IVR structure and resolve questions. Col. 8, lines 16-17. Specifically, the system allows the operator to test the IVR structure using the telephone and resolve problems by referring to the web menu structure on the computer. Col. 8, lines 21-24.

Therefore, Burg teaches monitoring of the automatic translation and limited correction of problems/questions associated with this translation, but does not allow the operator to develop the phone application code itself. For example, Burg states that the operator can verify the translation by tracking through the web page and site to resolve

questions (col. 7, lines 21-23 and col. 8, lines 16-17). Burg states that the IVR structure can be tested using a telephone and a computer. Burg then explicitly states that problems encountered during testing can be resolved by referring to the web menu structure on the computer (col. 8, lines 21-24). This web menu structure cannot be characterized as a call flow.

Applicants' recited call flow, which is presented to the remote computer, supports development of a phone application code for a computer based phone application platform. Of importance, Applicants note that the Office Action fails to identify any such platform in Burg.

As explicitly taught by Burg, web server 82 is registered as a homepage URL and includes the addresses of all URLs within the Web sales architecture. Col. 7, lines 59-62. Web server 82 functions as the homepage URL and URL of all linked pages. Col. 7, lines 62-64. The HTML documents and information in databases 80 and 81 are associated with these URLs. Col. 7, lines 64-65.

Notably, Burg also explicitly teaches that an IVR server 85 is electronically linked to web server 82, thereby allowing direct exchange of information and commands between web server 82 and IVR server 85. Col. 8, lines 4-8. Burg is silent as to where the translation of the web menu to IVR menu takes place. However, in the absence of any translation component in system 79 (Fig. 5), the transfer of commands between web server 82 and IVR server 85 would indicate that both web server 82 and IVR server 85 provide translation functions.

If that is the case, then Burg fails to teach receiving the phone application code over the network interface from a remote computer via a development platform web server and using a web protocol. Applicants' recited computer based phone application platform advantageously uses only web protocols.

House fails to remedy the deficiency of Burg. Specifically, House teaches that a help desk computer can debug an application while a user interacts with that application. Col. 6, line 67 to Col. 7, line 1. Specifically, a help desk technician can set breakpoints in the source code and watch variables to assist the user in debugging the application. Col. 7, lines 13-17. To set up this three-way communication, a development client, which is provided at the help desk machine, can generate a debug proxy file and provide this file to the user computer using a communication link. Col. 7, lines 36-42.

Notably, House fails to teach anything regarding a phone application code, much less receiving the phone application code over the network interface from a remote computer via a development platform web server and using a web protocol. House also fails to teach presenting a call flow to the remote computer over the network interface via the development platform web server and using the web protocol, the call flow tracking a flow of execution for a phone call. Therefore, House fails to remedy the deficiency of Burg.

Because Burg and House, either individually or in combination, fail to disclose or suggest the limitations recited in Claim 1, Applicants request reconsideration and withdrawal of the rejection of Claim 1.

Claims 2 and 4-6 depend from Claim 1 and therefore are patentable for at least the reasons presented for Claim 1. Based at least on those reasons, Applicants also request reconsideration and withdrawal of the rejection of Claims 2 and 4-6.

Claim 7, as amended, now recites in part:

receiving the phone application code over the network interface from a remote computer via a development platform web server and using HTTP;... and

presenting a call flow to the remote computer over the network interface, the call flow tracking a flow of execution for a phone call.

Applicants respectfully submit that Claim 7 is patentable for substantially the same reasons presented for Claim 1. Therefore, Applicants request reconsideration and withdrawal of the rejection of Claim 7.

Claim 9 depends from Claim 7 and therefore is patentable for at least the reasons presented for Claim 7. Based on those reasons, Applicants also request reconsideration and withdrawal of the rejection of Claim 9.

Claim 10, as amended, now recites in part:

receiving a reference to the phone application code over the network interface from a remote computer via a development platform web server and using a web protocol;... and
presenting a call flow to the remote computer over the network interface via the development platform web server and using the web protocol, the call flow tracking a flow of execution for a phone call.

Applicants respectfully submit that Claim 10 is patentable for substantially the same reasons presented for Claim 1. Therefore, Applicants request reconsideration and withdrawal of the rejection of Claim 10.

Claims 11-14 depend from Claim 10 and therefore are patentable for at least the reasons presented for Claim 10. Based on those reasons, Applicants also request reconsideration and withdrawal of the rejection of Claims 11-14..

Claim 15, as amended, now recites in part:

receiving over the web interface a uniform resource identifier (URI) from a second computer system, the URI corresponding to a location of a phone application;...and

upon receiving a request from the second computer system on the first computer system, presenting to the second computer debugging information generated by calls to the telephone number for the phone application on the phone application platform, wherein the debugging information includes a flow of execution for the calls.

Applicants respectfully submit that Claim 15 is patentable for substantially the same reasons presented for Claim 1.

The Office Action cites col. 8, lines 34-43 as teaching the claim limitation "receiving over a web interface...". However, this passage merely teaches that customers can access a web on-line service (with information stored in databases 101/102) using various computers and an IVR service (with information also stored in databases 101/102) using various telephones. This passage teaches nothing regarding supporting remotely hosted phone application development.

The Office Action further cites col. 8, lines 1-17 as teaching the claim limitation "responsive to receiving the URL...". However, this passage merely teaches making the connections shown in Fig. 5 and monitoring the automated translation of the web menu structure to the IVR menu structure. This passage teaches nothing regarding sending the first message to the phone application platform in response to receiving the URI.

The Office Action further cites col. 8, lines 18-34 as teaching the claim limitation "upon receiving a request...". However, the web menu structure provided on computer 84 cannot be characterized as a flow of execution for the calls to the telephone number for the phone application on the phone application platform.

Based on the above reasons, Applicants request reconsideration and withdrawal of the rejection of Claim 15.

Claims 16-22 and 24-27 depend from Claim 15 and therefore are patentable for at least the reasons presented for Claim 15. Based on those reasons, Applicants also request reconsideration and withdrawal of the rejection of Claims 16-22 and 24-27.

Claim 28, as amended, now recites in part:

responsive to receiving a telephone call via the telephone number, executing the phone application code, presenting an audio output over the telephone interface, and presenting a call flow to the remote computer over the network interface, the call flow tracking a flow of execution for the telephone call.

Applicants respectfully submit that Claim 28 is patentable for substantially the same reasons presented for Claim 1. Therefore, Applicants request reconsideration and withdrawal of the rejection of Claim 28.

Claim 29, as amended, now recites in part:

means for presenting to the second computer a call flow generated by calls to the telephone number for the phone application on the phone application platform upon receiving a request from the computer system, the call flow tracking a flow of execution for the calls.

Applicants respectfully submit that Claim 29 is patentable for substantially the same reasons presented for Claim 1. Therefore, Applicants request reconsideration and withdrawal of the rejection of Claim 29.

Burg, House, And Computing Fail To Render Obvious Claims 3 And 8

Claims 3 and 8 depend from Claim 1 and therefore are patentable for at least the reasons presented for Claim 1. Computing merely defines a trace program. Therefore, Computing fails to remedy the deficiencies of Burg and House. Based on these reasons, Applicants respectfully submit that the cited references fail to disclose or suggest Claims 3 and 8.

Burg, House, And Curreri Fail To Render Obvious Claim 23

Claim 23 depends from Claim 15 and therefore is patentable for at least the reasons presented for Claim 15. Curreri fails to remedy the deficiencies of Burg and House. Specifically, Curreri teaches a debugger that retrieves data from a mapping data structure. Col. 12, lines 62-63. This mapping data structure includes the data identifying data change point instructions. Col. 12, lines 63-64. The debugger uses that data to control execution of a program such that, in response to a user command, execution of the program is stopped at a data change point instruction. Col. 12, lines 65-67. Based on these reasons, Applicants respectfully submit that the cited references fail to disclose or suggest Claim 23.

CONCLUSION

Claims 1-29 are pending in the present Application.
Applicants respectfully request allowance of these claims.

If there are any questions, please telephone the undersigned at 408-451-5907 to expedite prosecution of this case.



Respectfully submitted,



Jeanette S. Harms
Attorney for Applicant
Reg. No. 35,537

Customer No.: 24488

I hereby certify that this correspondence is being deposited with the United States Postal Service as FIRST CLASS MAIL in an envelope addressed to: MAIL STOP AF, Assistant Commissioner for Patents, Washington, D.C., 20231, on April 21, 2004.

4/21/2004 
Date Signature: Rebecca A. Baumann

RECEIVED

APR 29 2004

Technology Center 2100